

A NEW SUBSPECIES OF *TURDUS SWALESI*
(AVES: PASSERIFORMES: MUSCICAPIDAE)
FROM THE DOMINICAN REPUBLIC

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Abstract.—A new subspecies, *Turdus swalesi dodae*, is described from the Sierra de Neiba and Cordillera Central of the Dominican Republic. The arid Cul-de-Sac/Valle de Neiba Depression forms a barrier between *T. s. swalesi* of the Massif de la Selle and Sierra de Bahoruco and *T. s. dodae*.

The La Selle Thrush, *Turdus swalesi*, one of the last species of birds to be described from the island of Hispaniola (Wetmore 1927, Wetmore and Swales 1931), was long believed to be endemic to the Massif de la Selle in southeastern Haiti. Within the past fifteen years, however, populations have been found in several localities in the Dominican Republic (Fig. 1). One of these near the Haitian border in the Sierra de Bahoruco was not unexpected, as this is only an eastward extension of the La Selle ridge (Bond 1977). Of greater interest was the subsequent discovery of two populations in

the mountains north of the arid Cul-de-Sac/Valle de Neiba Depression.

Although *T. swalesi* may be locally common (Bond 1928, Bond 1978), it is evidently represented by fewer than a dozen specimens in museums. From the small series at hand, there appears to be no geographic variation among specimens of the nominate form from the mountains south of the Cul-de-Sac Depression. The two specimens collected north of the depression, in the Sierra de Neiba and the Cordillera Central, however, represent a distinctive new subspecies.

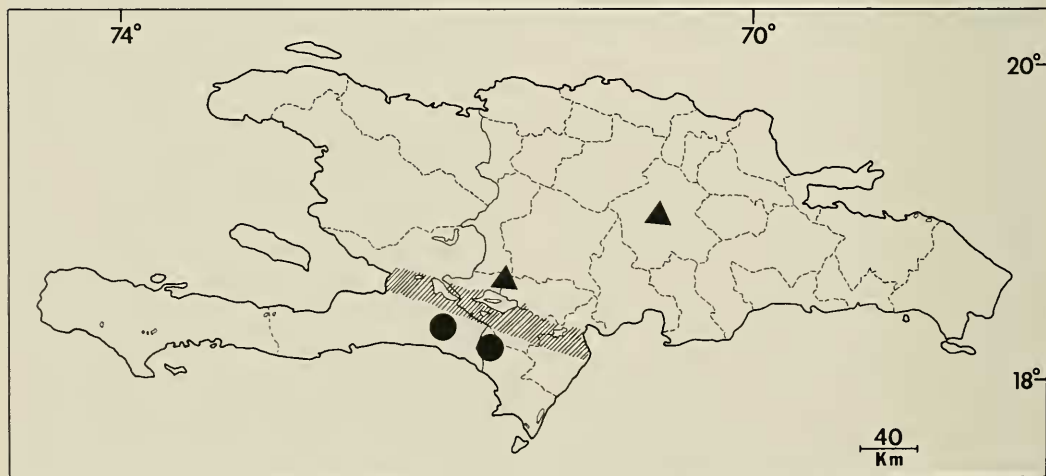


Fig. 1. Distribution of collected specimens of *Turdus s. swalesi* (circles) and *T. s. dodae* (triangles) on Hispaniola. Hatched area represents the Cul-de-Sac/Valle de Neiba Depression, which forms a low arid barrier between the "north" and "south" montane islands.

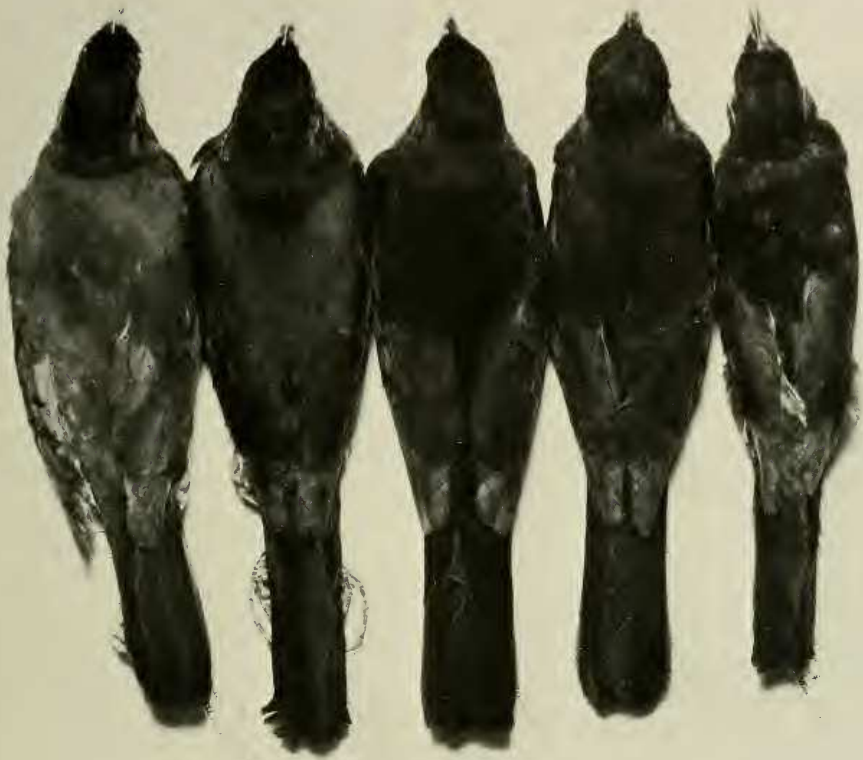


Fig. 2. Dorsal view (from left to right) of *Turdus s. dodae* (MNHN 647 ♀; USNM 536701 ♂) and *T. s. swalesi* (USNM 264705 ♀; USNM 264704 ♂; MNHN 197 ♀, subadult).

Turdus swalesi dodae, new subspecies
Fig. 2

Holotype.—National Museum of Natural History, USNM 536701; male, from near divide between Río Baiguatè and Río Jimenoa, about 15 miles (ca. 24 km) NE of Constanza, La Vega Province, Dominican Republic, elevation 5900 ft (1800 m); coll. 6 Mar 1976 by Francis M. Greenwell and William M. Perrygo.

Diagnosis.—*Turdus swalesi dodae* differs from *Turdus s. swalesi* in having an oliva-

ceous brown black (Saccardo's Umber to Umber-Brown; Ridgway 1912) contrasting sharply with the black of the hindneck and wings, whereas the dorsum of *T. s. swalesi* is uniformly black (Fig. 2).

Range.—Montane forest in the Sierra de Neiba and Cordillera Central, Dominican Republic.

Measurements.—See Table 1.

Specimens examined.—*Turdus s. swalesi*: Haiti: Massif de la Selle (USNM 264704 ♂, 13 Apr 1927; 264705 ♀, 13 Apr 1927;

Table 1.—Measurements (in mm) of *T. s. swalesi* and *T. s. dodae*. Wing and tail measured to nearest mm. Culmen measured from anterior edge of nostril.

	Wing (chord)	Tail	Tar- sus	Cul- men
<i>swalesi</i>				
Massif de la Selle				
USNM 264707 ♂ (type)	128	105	42.2	17.4
USNM 264704 ♂	131	105	44.7	15.4
USNM 264705 ♀	125	99	43.0	16.2
Sierra de Bahoruco				
MNHN 197 ♀ (subadult)	121	94	40.5	13.2
MNHN 879 ♀	128	100	44.0	16.4
<i>dodae</i>				
Sierra de Neiba				
MNHN 647 ♀	125	99	43.5	15.7
Cordillera Central				
USNM 536701 ♂	129	108	42.0	16.3

264707 (type) ♂, 15 Apr 1927). Dominican Republic: Loma de Toro, Sierra de Bahoruco (Museo Nacional de Historia Natural, Santo Domingo [MNHN] 197 ♀ subadult, 1 Sep 1972; 879 ♀, 15 Apr 1976). *Turdus s. dodae*: Dominican Republic: Sierra de Neiba (MNHN 647 ♀, 15 May 1975); NE Constanza (USNM holotype).

Etymology. — We take pleasure in naming this subspecies for Annabelle Dod, in recognition of her contributions to ornithology in the Dominican Republic.

Variation in Plumage

The type specimen of *T. s. dodae* was erroneously reported as an “immature specimen” (Bond 1977:12), possibly because of its olivaceous brown black. Unfortunately, the collectors did not include gonad or skull ossification data on the specimen tag. The unspotted, sleek glossy plumage and silvery auriculars indicate that the holotype is an adult in a definitive plumage; the only evidence that could be construed as indicating



Fig. 3. Dorsal plumage of subadult (top) and adult (sexes nearly identical) *T. s. swalesi*. Note the exposed apteria near the rictus and on the sides of the throat in the subadult.

immaturity are the pointed rectrices and faint brownish edgings of the greater wing coverts.

The juvenal plumage of *T. swalesi* is unknown. One of the specimens from the Sierra de Bahoruco (MNHN 197) appears to be a subadult in prebasic molt—the rictus is enlarged and fleshy, the plumage is lax and fluffy, especially on the breast and flanks, and apteria are exposed along the sides of the throat (Fig. 3). Compared with an adult female (MNHN 879) from the same locality, the plumage of the immature is similar in pattern, but duller and less glossy. Otherwise, faint spotting across the pectoral region of the immature is the only age-related difference. The presence of a “black back” in immature and definitive plumages of *T. s. swalesi* precludes the possibility that the olivaceous back, the diagnostic character of *T. s. dodae*, is just a feature of immature plumage in the species. It should be noted

that the distal $\frac{1}{3}$ to $\frac{1}{2}$ of the dorsal feathers of *T. s. dodae* are olivaceous, not merely the edges or tips.

The two examples of *T. s. dodae* differ from one another in several details: (1) the posterior margin of the black hindneck is V-shaped in the holotype but is rounded in the Sierra de Neiba specimen; (2) the olivaceous brown portion of the dorsum in the holotype is more restricted in distribution and contrasts more with the adjacent black plumage than in the Neiba specimen. We are unsure as to whether these differences represent intra- or inter-populational differences or sexual dichromatism. Given a larger sample, the Sierra de Neiba and Cordillera Central populations may be taxonomically separable from one another as well as from *T. s. swalesi*.

Discussion

The pattern of distribution of the two subspecies of *Turdus swalesi* is similar to that of numerous other Hispaniolan vertebrates, with the low arid areas of the Cul-de-Sac/Valle de Neiba presumably forming a barrier to gene flow between the southern peninsula of Haiti and the remainder of Hispaniola. During periods of marine transgression, this valley formed a channel separating the two land areas into discrete islands. The two-island theory has been used to explain the origin of a variety of species-pairs of birds, reptiles and amphibians (Pregill and Olson 1981). In some instances, members of these pairs have spread beyond their island of origin and co-occur in some regions (e.g., *Todus subulatus* and *T. angustirostris*). In other cases, allopatric taxa are still restricted either to the "north" or "south" island. Variance in the degree of

differentiation or sympatry among former isolates doubtless reflects differences in the time of splitting of ancestral populations, in dispersal ability, and in habitat preference.

Acknowledgments

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Literature Cited

- Bond, J. 1928. The distribution and habits of the birds of the Republic of Haiti.—Proceedings of the Academy of Natural Sciences of Philadelphia 80:483–521.
- . 1977. Twenty-first supplement to the check-list of birds of the West Indies (1956). Academy of Natural Sciences of Philadelphia. 16 pp.
- . 1978. Twenty-second supplement to the check-list of birds of the West Indies (1956). Academy of Natural Sciences of Philadelphia. 20 pp.
- Pregill, G. K., and S. L. Olson. 1981. Zoogeography of West Indian vertebrates in relation to Pleistocene climatic cycles.—Annual Review of Ecology and Systematics 12:75–98.
- Ridgway, R. 1912. Color standards and color nomenclature. Washington, D.C.: published by the author.
- Wetmore, A. 1927. A thrush new to science from Haiti.—Proceedings of the Biological Society of Washington 40:55–56.
- , and B. H. Swales. 1931. The birds of Haiti and the Dominican Republic.—Bulletin of the United States National Museum 155:1–483.

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